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TECHNICAL ASSISTANCE TEAM FOR EMERGENCY RESPONSE REMOVAL AND PREVENTION
EPA CONTRACT 68-01-7367

MEMORANDUM

TO: Bob Caron, OSC EPA Region III
Eastern Response Section (3HW31) TDD #9005-24
PCS #3211

THRU: Mike Zickler, TATL, Region III M2

FROM: Marian Murphy, TAT Region III MM

SUBJECT: Shaffer Equipment Samples Analytical Review

DATE: July 6, 1990

This report covers the review of thirty (30) soil samples collected at the Shaffer Equipment Site on June 14, 1990. The samples were delivered to Bridgeport Environmental on June 18, 1990. Analyses requested were PCBs, and base neutral acid extractables (BNA).

ANALYTICAL METHODOLOGY

The samples for PCBs were analyzed in accordance with EPA Method 8080 procedures. Only four (4) samples were analyzed for BNAs. The samples for BNAs were analyzed in accordance with EPA Method 8270.

- Signed Chain-of-Custody Records were received.
- The method blanks for both BNA and PCB were free of contamination.
- The BNA GC/MS tune data and daily standard data were acceptable. The surrogate spike recoveries for the samples were low due to the dirty matrix of the samples. The matrix spike/matrix spike duplicate recoveries were low for some phenols probably due to matrix effects since the same compound was low in both spikes. The relative percent difference (RPD) values were acceptable.

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Roy F. Weston, Inc.
MAJOR PROGRAMS DIVISION

In Association with ICF Technology, Inc., C.C. Johnson & Malhotra, P.C., Resource Applications, Inc.,
and R.E. Sarriera Associates

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- The daily standard data were acceptable. The surrogate spike recoveries for only the blanks were reported since the samples contained Aroclor 1260 and one peak in the Aroclor 1260 pattern interferes with the surrogate peak. The matrix spike/matrix spike duplicate recoveries were acceptable. Since eight spikes were analyzed a relative percent difference (RPD) was calculated. The RPD was 29.2, which is acceptable.
- Since eight (8) spikes were analyzed for this set of samples a Coefficient of Variation (CV) was determined and it was 28.8. The CV was used to calculate the actionable and non-actionable values. The value calculated for actionable using 50 ppm (ug/g) as the decision level is 64.4 ppm (ug/g). Values between 64.4 ppm (ug/g) and 35.6 ppm (ug/g) should be considered questionable. Values below 35.6 ppm (ug/g) should be considered non-actionable as per "Interim Final Guidance for the Quality Control Guidance and Removal Activities". Only two samples, samples S19 and S22, fall into this category.
- All positive PCB values were confirmed on a second column.
- No significant weathering of the Aroclor 1260 PCB pattern was noted for any samples with high concentrations of PCBs.

CONCLUSION

The results are acceptable. It should be noted that if 50 ppm is used as the action level, samples S19 and S22 are questionable data as stated above.

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